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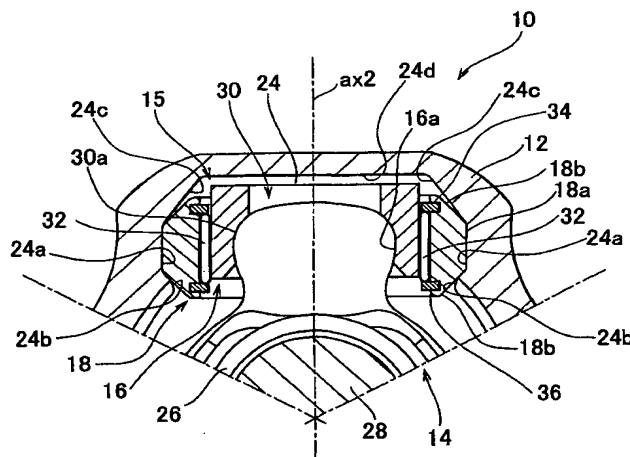
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(54) Title: **CONSTANT VELOCITY UNIVERSAL JOINT**



(57) Abstract: In a constant velocity universal joint (10) including a double roller type roller unit (15), a cylindrical surface (18a) is formed in a radially outer surface of the outer roller (18); a flat engagement surface (24a) which is engaged with the cylindrical surface (18a) is formed in each of the guide grooves (24) of the outer joint member (12); and the cylindrical surface (18a) satisfies following two equations,  $W1 > PCR(1 - \cos 0)/2 + \mu_3 R3 + \mu_2 R1$   $W2 > 3PCR(1 - \cos 0)/2 - \mu_3 R3 + \mu_2 R1$ , wherein W1, W2: a length from a center of the cylindrical surface (18a) to each of axially both end portions; PCR: a distance from an axis of the inner joint member (14) to a center of the convex sphere (30a) of each of the leg shafts (30); 0: a required maximum joint angle; R1, R3: radii of the cylindrical surface (18a) and the concave sphere (16a), respectively; and  $\mu_2$ ,  $\mu_3$ : friction coefficients between the inner roller (16) and the outer roller (18), and between the convex sphere (30a) and the concave sphere (16a), respectively.

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